



## **Introduction to Lean Six Sigma Processes Training Seminar Content**

### **Lean Six Sigma Introduction Course Content**

- Seminar Contents Overview

#### **Introduction to Lean**

- Lean Principles
- Lean Concepts
- The Six Production Losses
- The 7 Wastes and Others
- The Seven Process Wastes
- Looking for 'Waste' in Processes
- Benefits of Lean
- Monitoring Operating Effectiveness
- Production Losses and Overall Equipment Effectiveness
- Just-in-Time vs. Work-in-Progress
- Work-in-Progress Batch Inventory

#### **The Critical Lean Concepts**

- To Be Lean = Eliminate Non-Value
- "Would the Customer be less satisfied with the product if this step were left out?"
- Schedule to Match Takt Time
- Refine Your Value Adding Stream
- To Have Flow = Standardise & Level
- Benefit of Flow
- When Applied To Business Processes
- History of Value Stream Mapping
- The Concept of Customer Value and Non-Value
- The Value Stream Concept
- Discovering the Hidden Factory
- The Hidden Factory
- Another View of the 'Hidden Factory'
- Straighten the Workflow
- Total Productive Maintenance is ... operator driven reliability:
- The Operators' Creed of TPM –
- TPM Works by Reducing Risk of Failures
- Standards and Standardisation
- Standardise the Work
- Developing Standardised Work
- 5S Creates a Visual Factory
- The 5S Cycle
- 5S Activities Explained

#### **Lean Process Example**

- Process Investigation
- Collecting Data from the Process
- The Current State Map
- Example of Current State Map
- Spotting Productivity Improvements
- Visualise Productivity Improvements
- Future State Map
- Future State Map
- Implementation Plan
- Repeat the VSM Process



## **Lean Six Sigma Introduction Course Content Continued**

### **Introduction to Six Sigma**

- What Six Sigma Means
- Defining What Good Performance Is
- Chance of Failure at Each Sigma Level
- Journey to 6 Sigma - Minimizing Variability
- What is Variation
- The Problems Start with Variation
- Causes of Variation

### **The Importance of Controlling Variation**

- Where Profit is Lost in Business Processes
- Defects Cause Failure
- Failures Misuse Time and Resources
- The Best are Proactive – They Do Defect Elimination and Failure Prevention
- Problems are Variations Caused by Defects
- Stop Defects and you Stop Problems
- Reducing Variation with a Quality Systems
- The Purpose of a Quality Management System
- Planned Efforts to Remove Variation
- Applying Six Sigma for Improvement

### **Applying Six Sigma**

- Where Profit is Lost in Business Processes
- Why Organizations Lack Focus
- Roles in Six Sigma
- Six Sigma DMAIC process
- Six Sigma Project Life Cycle
- Problem Difficulty Distribution
- Defining Precision
- The Odds are Against Doing it Right!
- The Story in Human Error Rate Tables
- Human Factors – the limitations of People
- 12 Most Common Causes for Human Errors
- Apply Basic Statistical Control and Visual Management
- When Process Variability is Out-of-Control
- Process Quality Control Starts by Setting Outcome Limits
- Journey to 6 Sigma: Control Your Processes
- Move to 'Preventive' Quality Control
- 4 Pillars of Quality Management Systems

### **Introducing Lean Six Sigma into Organisations**

- Elements of a Good Management System
- What Are the Critical Success Factors?
- Start Measuring Plant Non-Performance
- Getting high task reliability needs quality
- Understanding what it means to be 'in control and capable'
- Accuracy Controlled Enterprise (ACE) Standard Operating Procedures Adds Statistical Process Control to Work Processes
- Remove variation ... by setting standards and measuring accuracy
- Accuracy Controlled Enterprise (ACE) Procedures
- The Accuracy Controlled Enterprise is...



## **Lean Six Sigma Introduction Course Content Continued**

- Accuracy Controlled SOPs Remove Variation with Proactive Statistical Process Control
- 7 Primary Quality Control Tools
- When to Apply the Quality Control Tools
- Pareto Chart the Problems for Focus

### **Six Sigma Process Example**

- The Interested Parties and Business Consequences Supplier
- Identify the Process and Responsibilities
- Measure the True Situation
- Value Added for Customer
- Analyse for Causes and Wastes
- Improve the Process
- Control Process & Imbed Improvements
- Remove Roadblocks in the Way to Lean
- Change Management Matrix
- Management of Change
- **Collaboration is unnatural ...**
- For change to be successful and effective in the long term, it is necessary that there is: